

Remarks

Claims 1, 2, 3, 5, 7-12, 14, and 16-21 were the subject of the office action dated April 23, 2003. Claims 2, 3, 7, 11, 12, 16, 18, 20, and 21 are hereby canceled without prejudice as discussed below. Thus, claims 1, 5, 8-10, 14, 16, 17, and 19 are now presented for further consideration.

The applicants wish to thank the examiner for indicating that claims 5, 8, 14, and 17 are allowable.

Claims 20-21 are canceled without prejudice as being drawn to non-elected subject matter.

Claims 7, 9, 16, and 18 stand rejected under 35 USC §112, second paragraph, as being indefinite in light of the use of the term "approximately." Language from claim 7 (and claim 16) has been added to claim 1 (and claim 10). Although the term "approximately" is not specifically included in claim 1 (and has been removed from claims 9 and 16) in order to lend even further clarity to this claim (*i.e.*, these claims are not intended to cover the full-length SEQ ID NO:2), it should be noted that minor additions and/or deletions can be made to the referenced segment. This is discussed in more detail below.

In light of language from claim 7 and claim 16 being added to claim 1 and claim 10, claims 7 and 16 are canceled without prejudice.

In light of the foregoing, the indefiniteness rejection should be rendered moot. Thus, the withdrawal of this rejection is respectfully requested.

Claims 1-3, 7, 9-12, 16, 18, and 19 stand rejected under 35 USC §103(a) in view of U.S. Patent No. 5,262,159, Aronson, Nagamatsu, Pfannenstiel, Nicholls, and Wabiko.

Claims 1 and 10 now refer to a segment of SEQ ID NO:2, as described in Example 3 and as tested (and found to surprisingly have *increased* toxicity) in Example 4. As mentioned above, it should again be noted that minor changes could be made to the segment referred to in claim 1. For example, amino acids 3-432 (the C terminus) of SEQ ID NO:6 correspond to amino acids 14-443 of SEQ ID NO:2; two amino acids were added at the C terminus (residues 1 and 2 of SEQ ID NO:6). It is not uncommon for some minor amino acid changes to be introduced when optimizing the gene, which can include the introduction (or removal) of a translation start codon,

for example. It might also be noted that SEQ ID NO:8 is a fragment of SEQ ID NO:6 (resulting from a C terminal deletion / truncation); SEQ ID NO:8 is encoded by a plant-optimized gene. SEQ ID NO:8 corresponds to residues 14-390 of SEQ ID NO:2, with the same two added N terminal residues as SEQ ID NO:6.

Although the foregoing should render this rejection moot, the applicants wish to note that while it was known in the art that truncations of various types of *B.t.* toxins can result in truncated toxins that *retain* the activity of the native toxin, the subject truncations were surprising, and it was surprising that the subject truncations of the 86A1-type toxins have *increased* toxicity (more active than the native toxin).

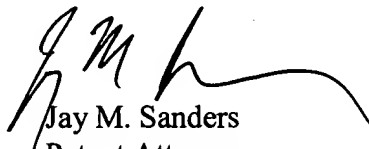
In light of the foregoing, the withdrawal of this obviousness rejection is respectfully requested.

The applicants believe that this application is in condition for allowance, and such action is earnestly solicited.

The Assistant Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 and 1.17 as required by this paper to Deposit Account 19-0065.

The applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



Jay M. Sanders
Patent Attorney

Registration No. 39,355

Phone No.: 352-375-8100

Fax No.: 352-372-5800

Address: 2421 N.W. 41st Street, Suite A-1
Gainesville, FL 32606-6669

JMS/ehm